

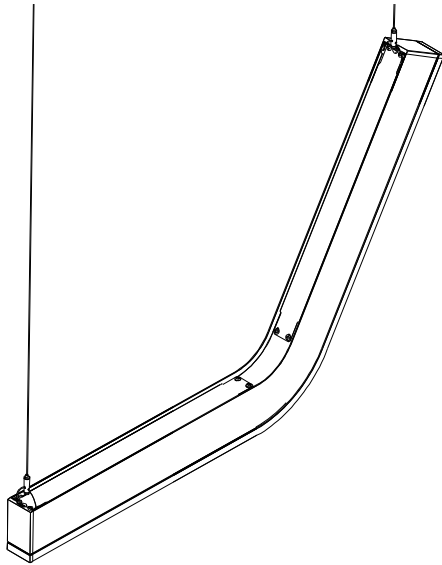


# LEDALITE

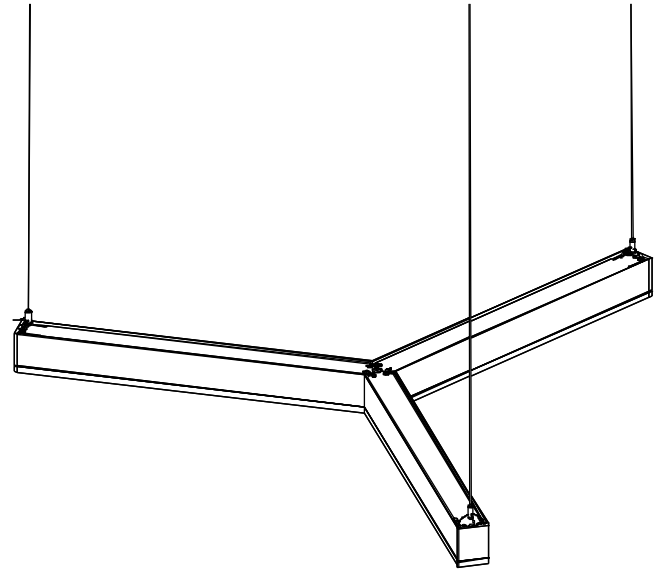
## Architectural Linear

### TruGroove Micro Flex

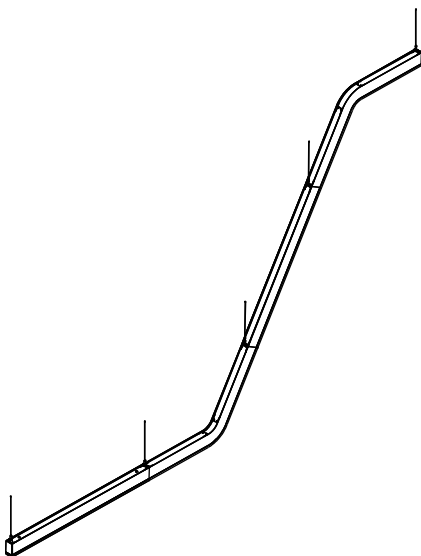
ID – TM Flex Suspended



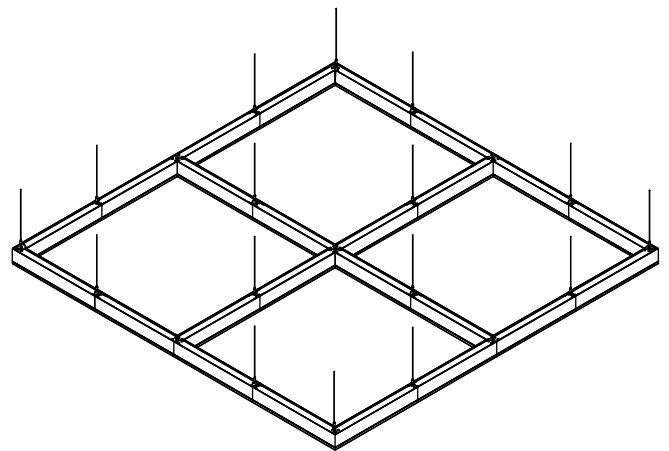
TM Flex Vertical



TM Flex Horizontal



TM Flex Vertical Patterns



TM Flex Horizontal Patterns

**IMPORTANT:** Read all instructions including fixture/sensor wiring AND mechanical details **before** beginning installation.

**!** **ATTENTION: Install in accordance with local and national building and electrical codes.**

*This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*



### IMPORTANT:

Disconnect or turn off power before attempting any installation, service or maintenance.



### IMPORTANT:

Fixture must be connected to building ground via the provided ground wire before re-connecting to mains power supply.



### ! Installation

Read all instructions including fixture/sensor wiring AND mechanical details **before** beginning installation.

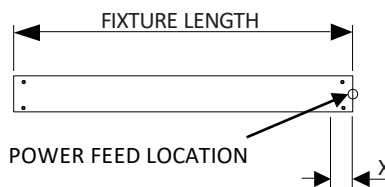
Beware of sharp edges on fixture.

### ! Power Label Location

For D/I symmetric and asymmetric fixtures, power labels can be found on lower light engine pans or under end louver modules.

For Direct and D/I-Unlit fixtures, power labels can be found on upper pan.

### ! Mounting & Power Location



Caution: To ensure a safe install, the variable aircraft cable mounting point (X) must be located within 12" for Direct/Indirect distribution and 3" for Direct distribution of the fixture end.

### ! Ceiling Mount Installation



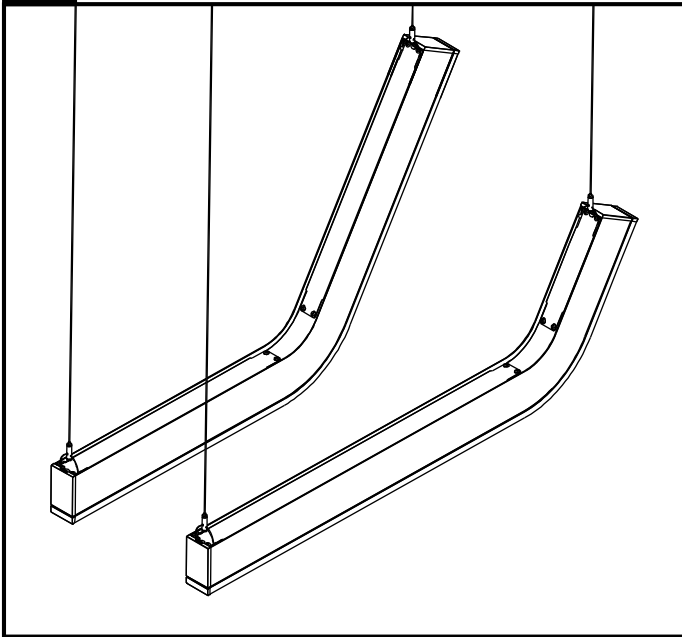
### ! Installation Notes

Arrange boxed fixtures on floor in specified mounting locations, based on supplied layout drawings. Remove fixtures from boxes. Install all ceiling mounting components and vertical aircraft cables using separate installation instruction for Aircraft Cable Mounting (supplied).

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

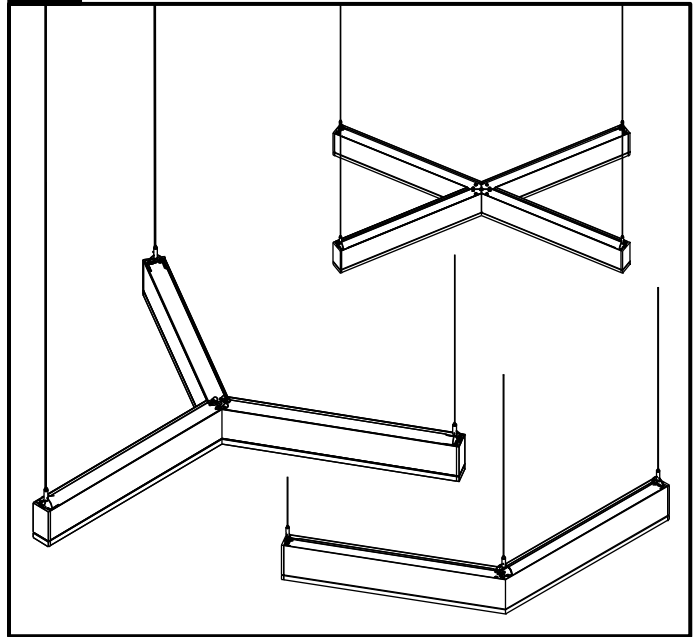
## 01 TM FLEX VERTICAL

PG. 4



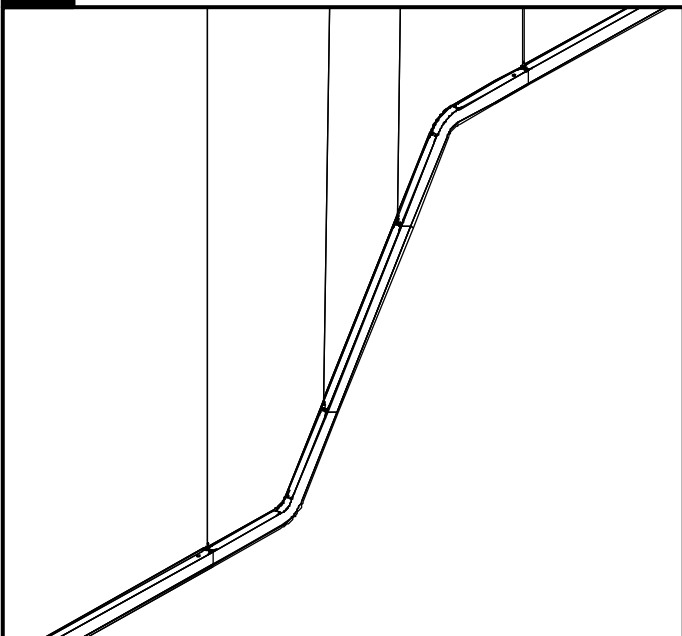
## 02 TM FLEX HORIZONTAL

PG. 9



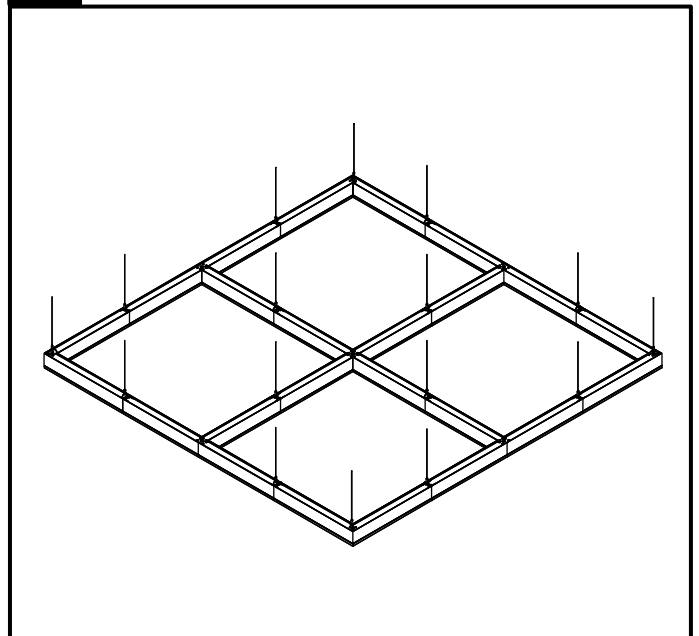
## 03 TM FLEX VERTICAL PATTERNS

PG. 14



## 04 TM FLEX HORIZONTAL PATTERNS

PG. 17



**!** ATTENTION: Install in accordance with local and national building and electrical codes.



## System Overview

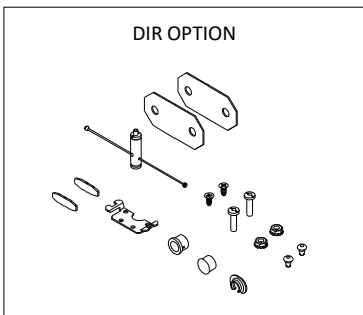
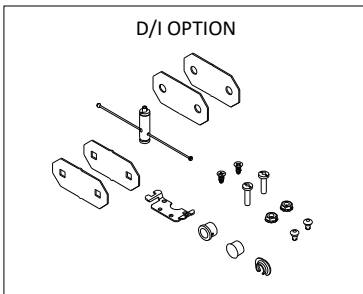
These instructions review how to install TruGroove Micro Flex Vertical suspended fixtures. Please refer to layout drawings supplied by Ledalite in conjunction with these installation instructions. These fixtures can be joined to linear TruGroove Micro fixtures or other fixtures from the TM Flex portfolio.

**IMPORTANT: Read all instructions including fixture/sensor wiring AND mechanical details before beginning installation.**

### TM Joint Kit - Locking

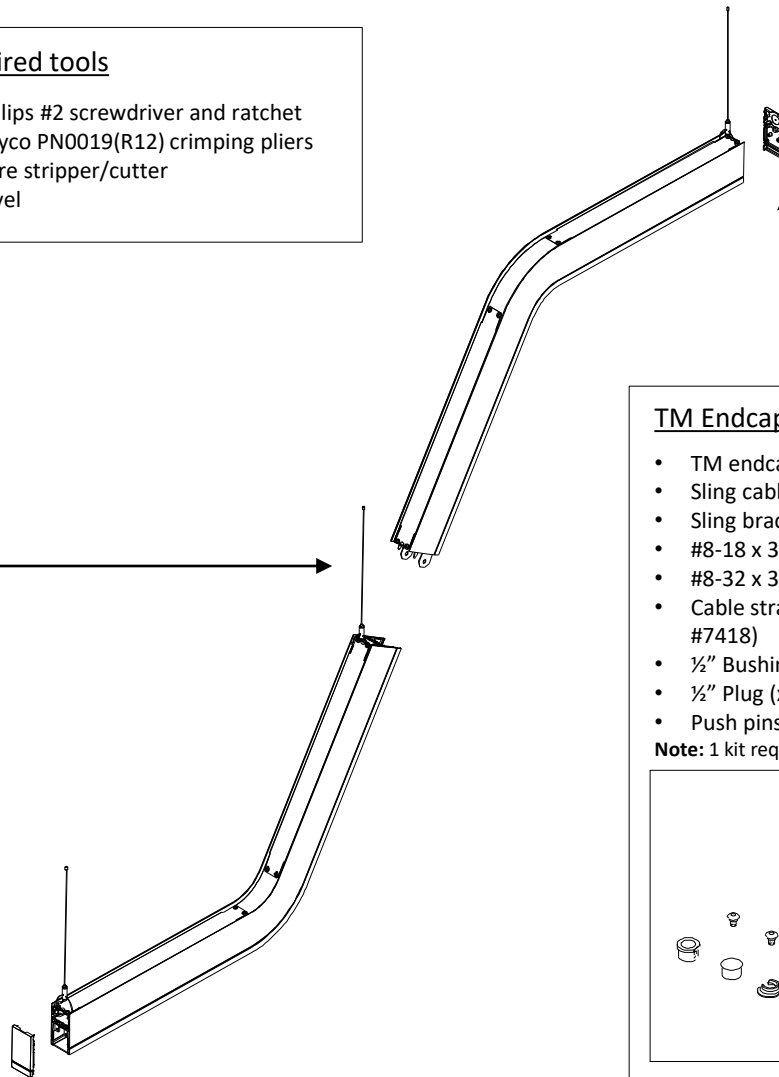
- Sling cable assembly (x1)
- Joiner aligners (x4)
- #10-24 x 9/16 screws (x2)
- #10-24 nuts (x2)
- Cable strain relief (x1) (Heyco #7418)
- ½" Bushing (x1)
- ½" Plug (x1)
- Push pins (x2)
- Sling bracket (x1)
- #8-18 x 3/8 screws (x2)

**Note:** 1 kit required per joint



### Required tools

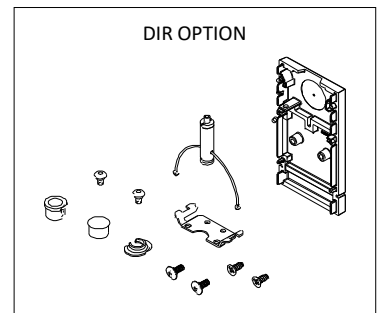
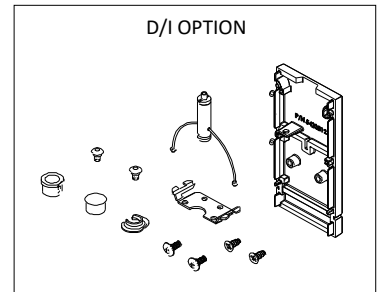
- Philips #2 screwdriver and ratchet
- Heyco PN0019(R12) crimping pliers
- Wire stripper/cutter
- Level



### TM Endcap Kit - Locking

- TM endcap (x1)
- Sling cable assembly (x1)
- Sling bracket (x1)
- #8-18 x 3/8 screws (x2)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (x1) (Heyco #7418)
- ½" Bushing (x1)
- ½" Plug (x1)
- Push pins (x2)

**Note:** 1 kit required for each capped end



## Module options

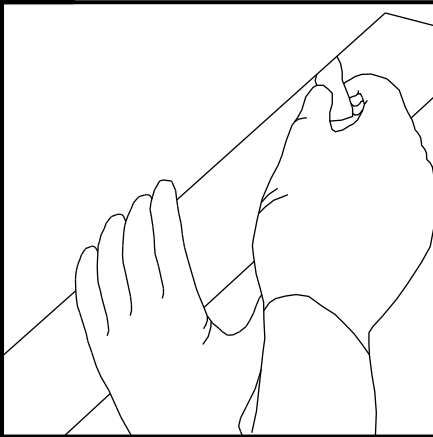
TruGroove Micro Flex Vertical offering consists of 30°, 45° & 60° up and 30°, 45° & 60° down for 2'x2' or 3'x1' options.

**Note:** The installation step figures might slightly differ from the actual fixture depending on the fixture option.

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

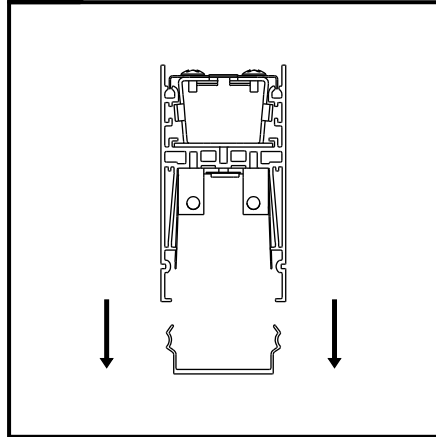
**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

## 1a Lens Removal



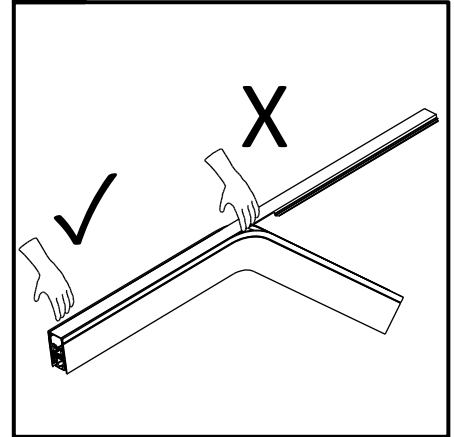
**Lens Removal:** To remove snap-in lens for maintenance purposes, insert a flat, smooth edged object between lens and housing (avoid screwdrivers). Twist to release pressure and remove lens.

## 1b Lens Removal



Remove lens starting on one end of the fixture and work it out up to the lens cutout. Repeat starting on the other end. Set lens aside until fixture installation is complete. Use cotton gloves to handle lenses and keep in a clean environment.

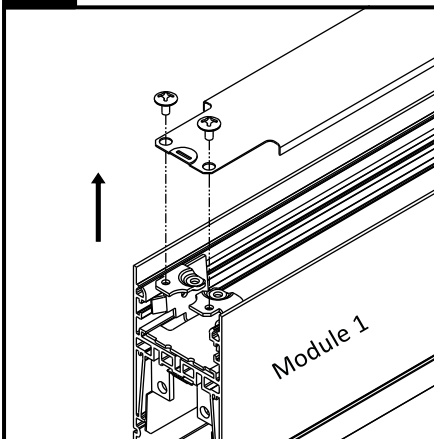
## 1c Lens Removal



**IMPORTANT:** Start at end. Do not pull from the cutout area of the lens. Once one half of the lens is removed, start at opposite end to remove the remaining half. Handle with care.

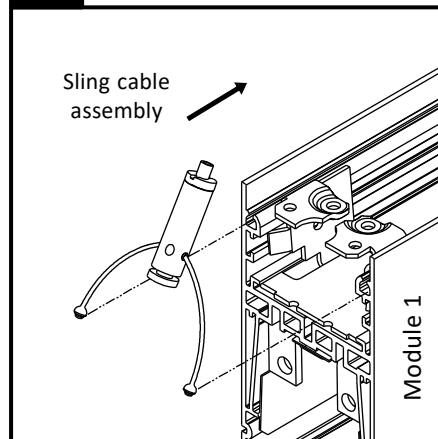
**!** **Warning!** Steps 3 to 6 are critical to the safety of the product installation. Follow closely.

## 2 Remove Top Pan



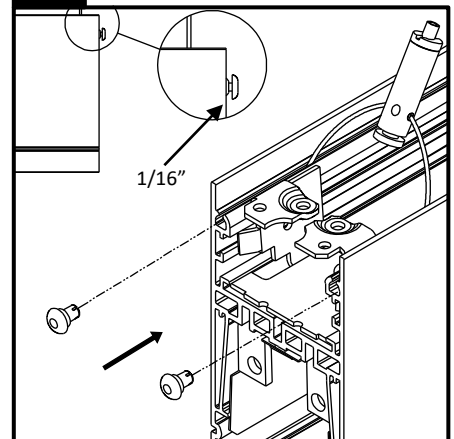
With module 1 on the ground, unscrew all the top screws of the side of the fixture that will have the sling mount and remove top pan. Save screws for re-installation later.

## 3! Sling Mount Installation



With module 1 on the ground, slide sling cable assembly into top fixture screw chase. Repeat on both ends of initial fixture. Only repeat for one end of the consecutive fixtures. Consecutive fixtures only require one sling as the other end connects to a fixture already having a sling.

## 4! Secure Sling Mount



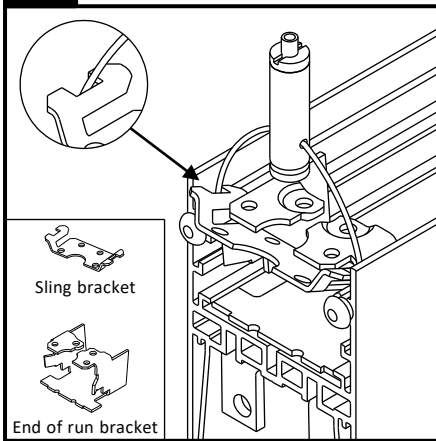
Attach two temporary push pins to the screw chase to prevent sling assembly from slipping out. Gently tap each push pin into the housing leaving a 1/16" gap for easy removal later.

**NOTE:** Make sure the sling has not come out of the screw chase while installing pins.

**!** **ATTENTION:** Install in accordance with local and national building and electrical codes.

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

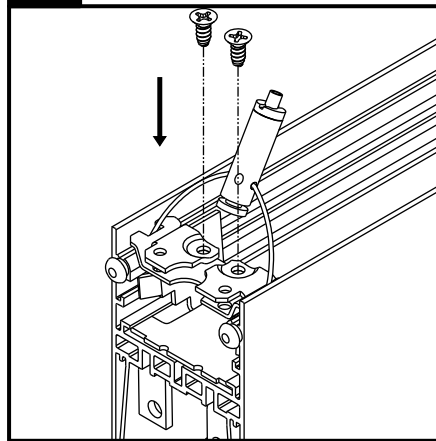
## 5! Install Sling Bracket



Fish the sling cable within the openings of the bracket. Slide the sling bracket into the housing. The sling bracket will sit underneath the end of run bracket.

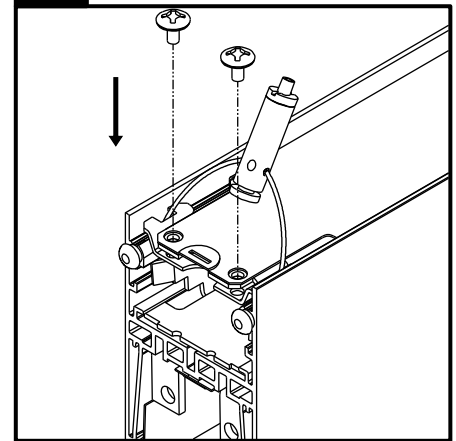
**NOTE:** Make sure the sling cable is in between the openings of the bracket.

## 6! Secure Sling Assembly



Secure sling bracket using two #8-18 x 3/8 screws Phillips screws provided.

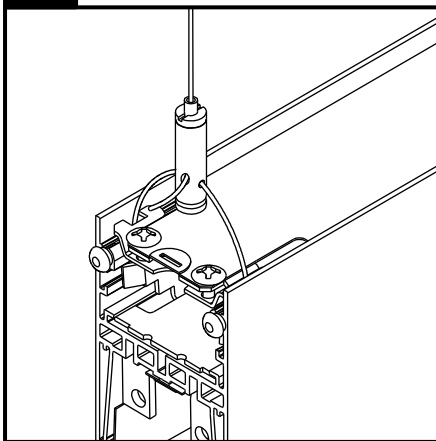
## 7 Install Top Pan



Reinstall top pan removed in step 2. Reinstall all screws previously removed. **IMPORTANT:** Do not pinch any wires.

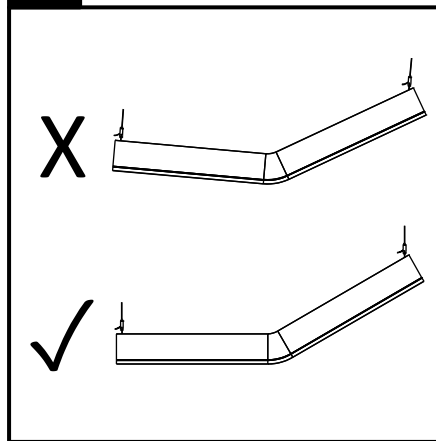
**! Warning!** Steps 3 to 6 are critical to the safety of the product installation. Follow closely.

## 8 Fixture Suspension



Raise fixture to installed level and insert suspension cable inside sling cable assembly. Ensure end of aircraft cable exits from side of sling cable assembly as shown.

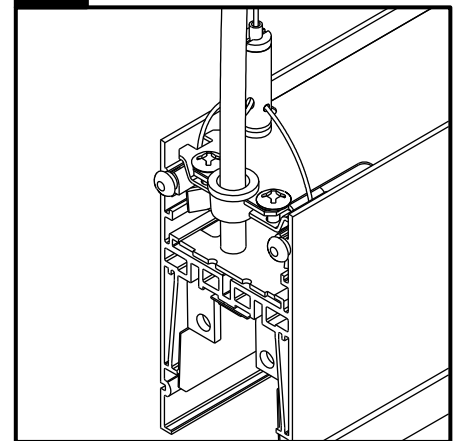
## 9 Leveling instructions



Ensure module 1 is installed level. Do not install at an angle if its not indicated in the layout drawings provided.

**NOTE:** See leveling instructions.

## 10 Power Cord Installation

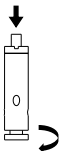


Determine power feed location and remove 1/2" electrical knockout at required end. Install 1/2" bushing from above fixture as shown. Feed power cord from above into fixture wiring cavity.

**!**

**LEVELING INSTRUCTIONS:** For side to side leveling, loosen adjustment screw at bottom of cable gripper and slide slowly until level. When complete, re-tighten levelling screw by hand.

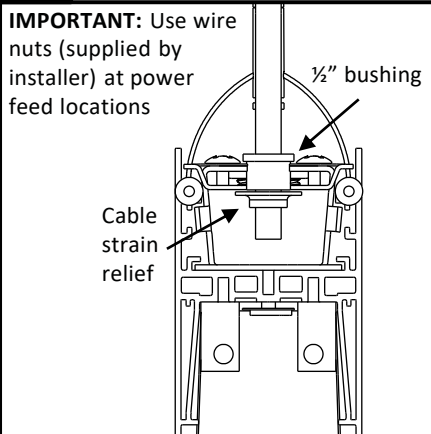
For vertical leveling, support bottom of fixture, press plunger on top of cable gripper and slowly lift/lower fixture to desired position. Release plunger when complete. Ensure fixture is secure before removing support.



**! ATTENTION:** Install in accordance with local and national building and electrical codes.

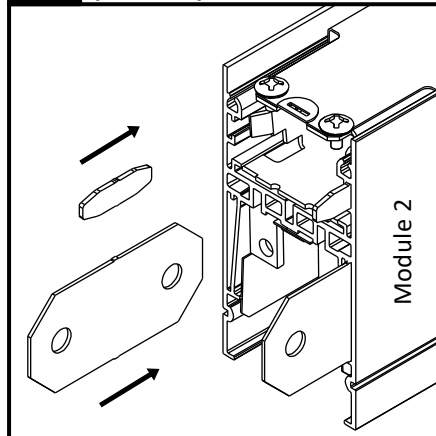
**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

## 11 Power Cord Retention



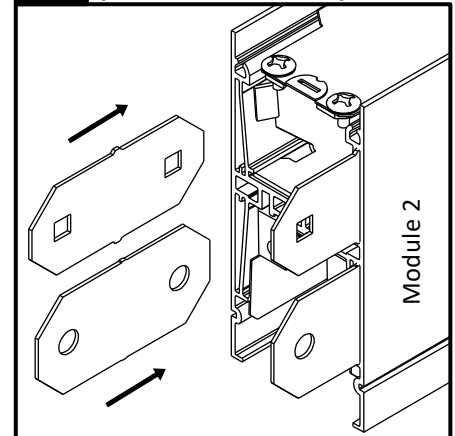
Install and crimp provided cable metal strain relief bushing to secure power cord below fixture reflector. Use a Heyco PN0019(R12) crimping tool to ensure proper installation.  
**NOTE:** If installing a standalone fixture, skip to step 17.

## 12a Fixture Joining (DIRECT)



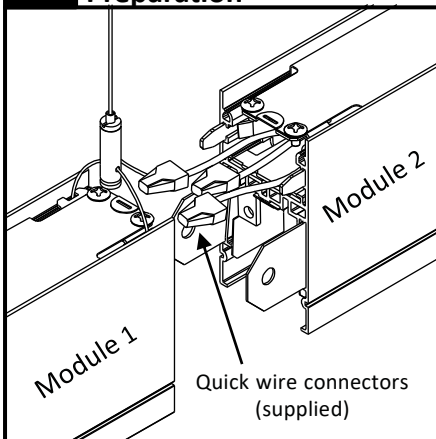
With module 2 on the ground, tap small joiner aligners inside top chase. Insert larger joiner aligners inside lower chase as shown.  
**IMPORTANT:** To allow for proper joining, ensure each center aligner tab is fully inserted inside module 2 housing, about 1/4" past the middle point.

## 12b Fixture Joining (DIRECT/INDIRECT)



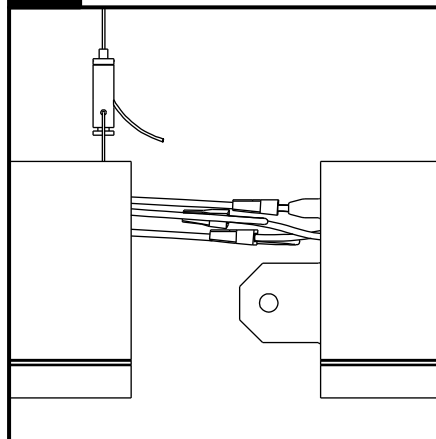
With module 2 on the ground, tap joiner aligners inside upper and lower chase as shown.  
**IMPORTANT:** To allow for proper joining, ensure each center aligner tab is fully inserted inside module 2 housing, about 1/4" past the middle point.

## 13 Fixture Joining - Preparation



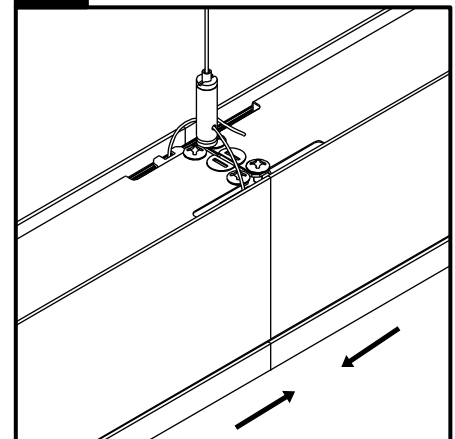
Raise module 2 to the installed module 1 position. Install module 2 by following steps 1 - 9.  
**IMPORTANT WIRING INSTRUCTIONS:** Quick wire connectors (supplied) are used for through wiring connections between fixtures. Wire nuts (supplied by installer) are used for connection of power drops wiring to fixture wiring. See 20-22 for control wiring information.

## 14 Wiring Connection



Bring modules close together, support module 2, complete wiring connections and tuck wires inside fixture wiring cavity. Remove push pins from module 1. Engage joiner aligners from module 2 inside module 1.

## 15 Fixture Joining

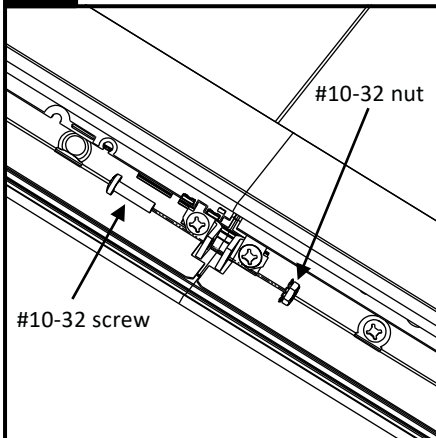


Ensure all connections are secure and all wires are fully tucked inside fixture wiring cavity. Slide fixture modules together gently. Level fixtures.  
**IMPORTANT:** Do not pinch wires between modules.

**!** **ATTENTION:** Install in accordance with local and national building and electrical codes.

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

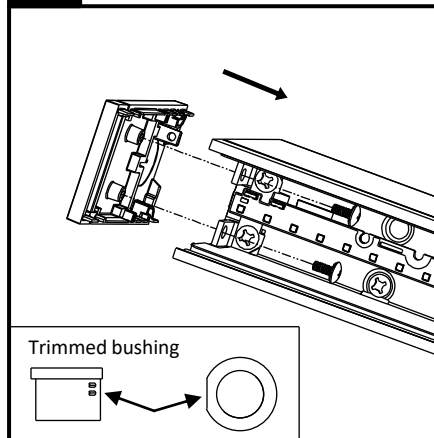
## 16 Fixture Joining - Securing



Secure fixture modules together using the two #10-32 machine screws and the two self locking #10-32 nuts supplied. Tighten until joint seam is tight.

**IMPORTANT: Do not overtighten.**

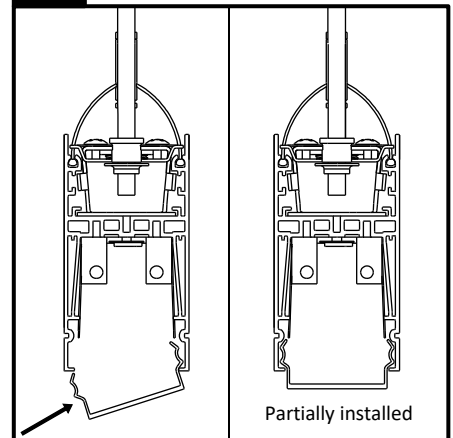
## 17 Endcap Installation



If power drop location is at the end of run, trim 1/2" bushing as shown. Remove push pins and slide endcap onto end of the fixture run and secure from below using two #8-32 X 5/16" screws. Use ratchet to tighten screws until endcap seam is tight.

**IMPORTANT: Do not overtighten.**

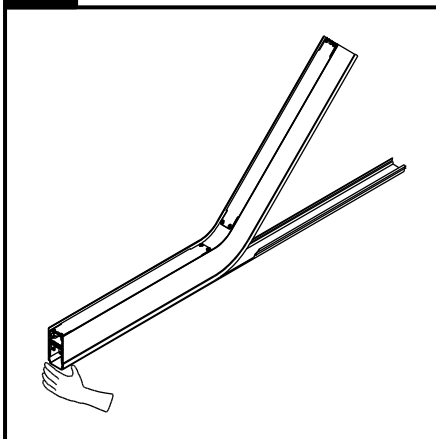
## 18a Fixture Lens Installation



Install lenses removed in step 1. Start at a housing end or a joint by placing lens at an angle and squeezing in slightly from the other side to position it inside housing.

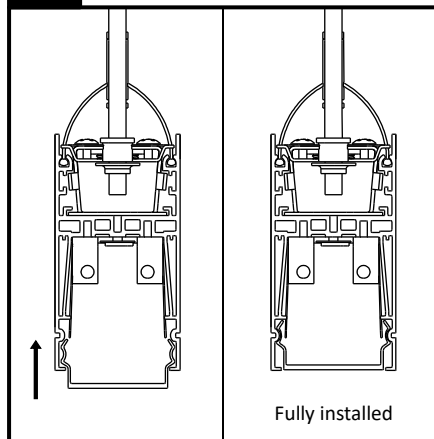
**IMPORTANT: Ensure end of lens is flush to end of housing before installing.**

## 18b Fixture Lens Installation



**IMPORTANT: Position lens in one half of the fixture first – partially installed – and then proceed to the other half. Handle with care.**

## 18c Fixture Lens Installation



Once lens is positioned inside housing, starting on one end or joint, push upwards gently and work outward to complete the section.

## ! Finishing

- Ensure all fixtures are level.
- Check that all joint or endcap screws are installed, and all seams are tight.
- Ensure top pan is properly installed.
- Power fixtures on and check all modules light up.
- Ensure lenses are securely installed.
- Tuck in excess suspension cable under top pan

**! ATTENTION: Install in accordance with local and national building and electrical codes.**



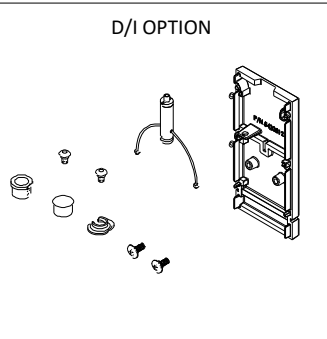


## System Overview

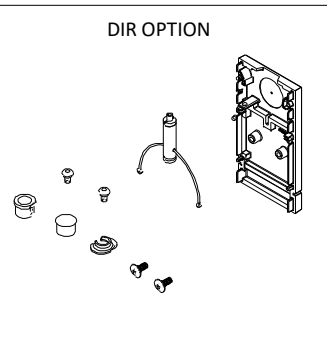
These instructions review how to install TruGroove Micro Flex Horizontal fixtures. These fixtures can be joined to linear TruGroove Micro fixtures or other fixtures from the TM Flex portfolio.

**IMPORTANT: Read all instructions including fixture/sensor wiring AND mechanical details before beginning installation.**

D/I OPTION

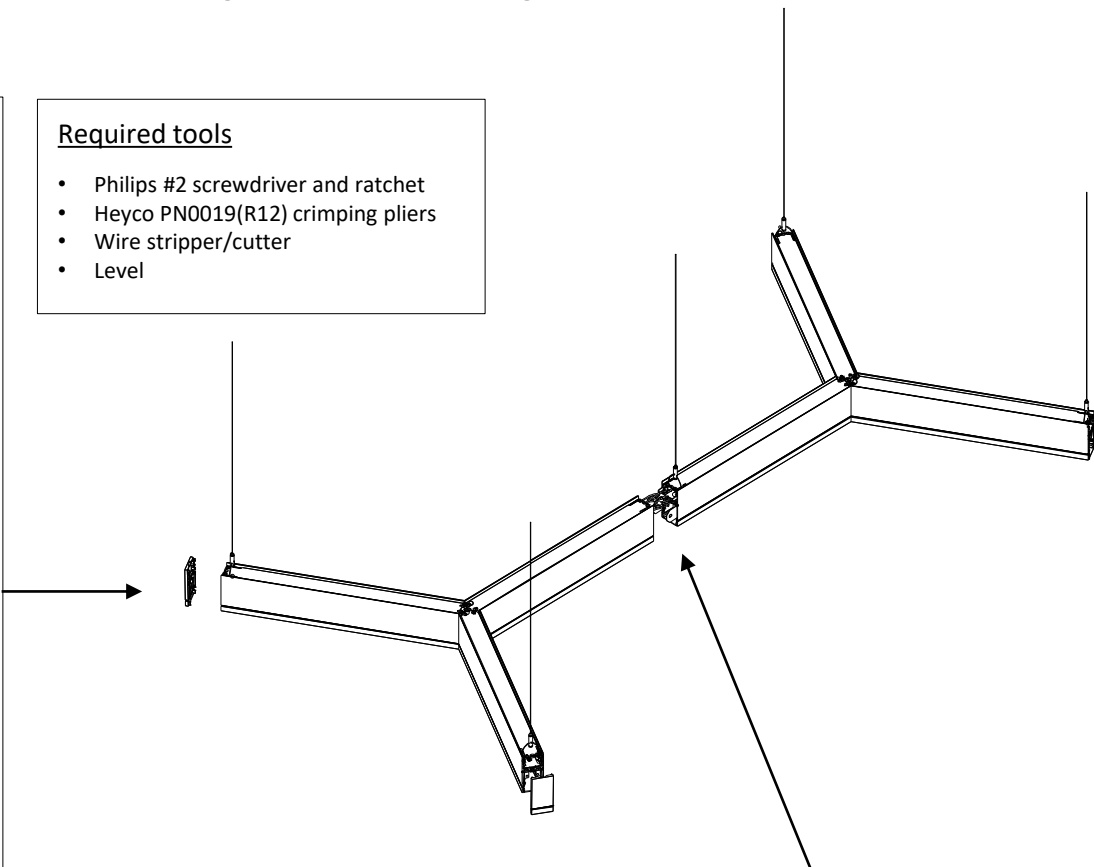


DIR OPTION



Required tools

- Philips #2 screwdriver and ratchet
- Heyco PN0019(R12) crimping pliers
- Wire stripper/cutter
- Level



TM Endcap Kit

- TM endcap (x1)
- Sling cable assembly (x1)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (x1) (Heyco #7418)
- 1/2" Bushing (x1)
- 1/2" Plug (x1)
- Push pins (x2)

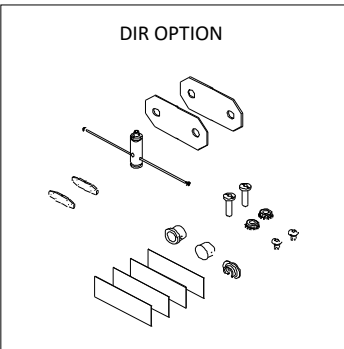
Note: 1 kit required for each capped end

TM Joint Kit

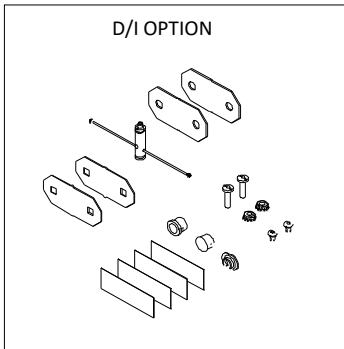
- Sling cable assembly (x1)
- Joiner aligners (x4)
- #10-24 x 9/16 screws (x2)
- #10-24 nuts (x2)
- Cable strain relief (Heyco #7418) (x1)
- 1/2" Bushing (x1)
- 1/2" Plug (x1)
- Push pins (x2)
- Light blocking tape (x4)

Note: 1 kit required per joint

DIR OPTION



D/I OPTION



## Module options

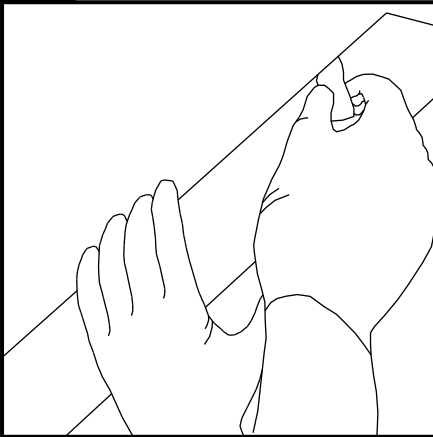
TruGroove 2/3/4-Way Horizontal offering consists of Y, T, +, and X for 3 and 4-way offerings, and 45°, 60°, 90°, 120°, and 135° for 2-way options.

**Note:** The installation step figures might slightly differ from the actual fixture depending on the fixture option.

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

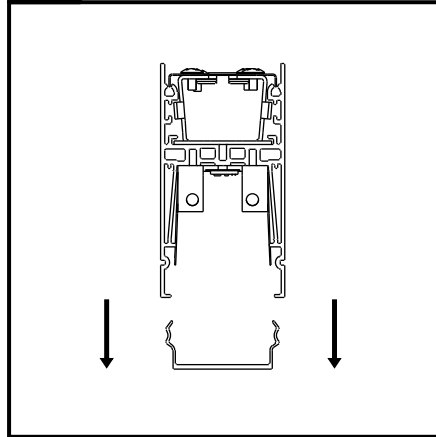
**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

## 1a Lens Removal



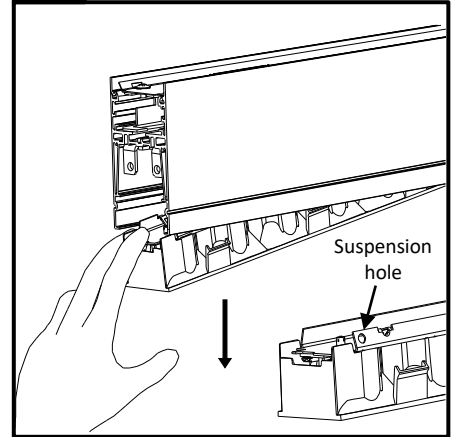
**Lens Removal:** To remove snap-in lens for maintenance purposes, insert a flat, smooth edged object between lens and housing (avoid screwdrivers). Twist to release pressure and remove lens.

## 1b Lens Removal



Remove lens from fixture and set aside until fixture installation is complete. Use cotton gloves to handle lenses and keep in a clean environment.

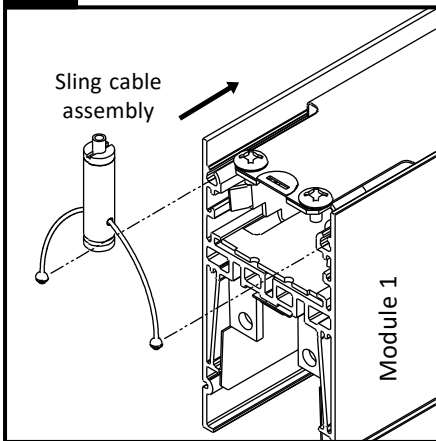
## 1c Louver Removal



Remove one louver from end of fixture by pulling gently and temporarily suspend from available holes.

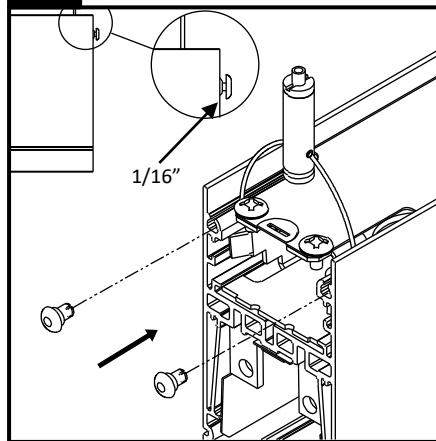
**Do not allow the louver to hang from electrical wires.**

## 2 Sling Mount Installation



With module 1 on the ground, slide sling cable assembly into top fixture screw chase on all ends of the first fixture in a row. Consecutive fixtures only require one sling as the other end connects to a fixture already having a sling.

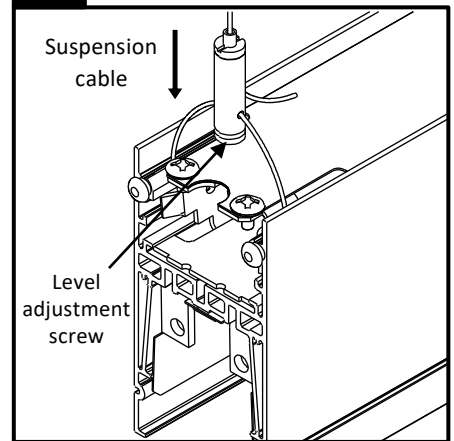
## 3 Secure Sling Mount



Attach two temporary push pins to the screw chase to prevent sling assembly slipping out. Gently tap each push pin into the housing leaving a 1/16" gap for easier removal later.

**NOTE: Make sure the sling has not come out of the screw chase while installing pins.**

## 4 Fixture Suspension

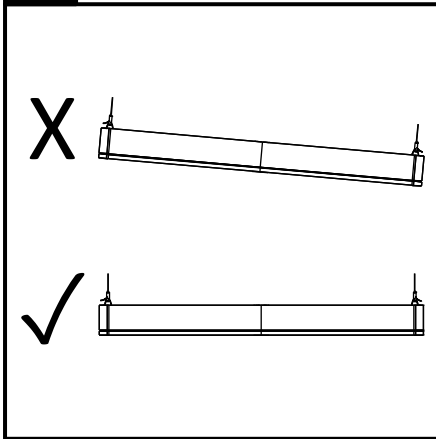


Raise fixture to installed level and insert suspension cable inside sling cable assembly. Ensure end of aircraft cable exits from sling cable assembly as shown.

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

## 5 Fixture Leveling



Ensure module 1 is installed level. Do not install at an angle.

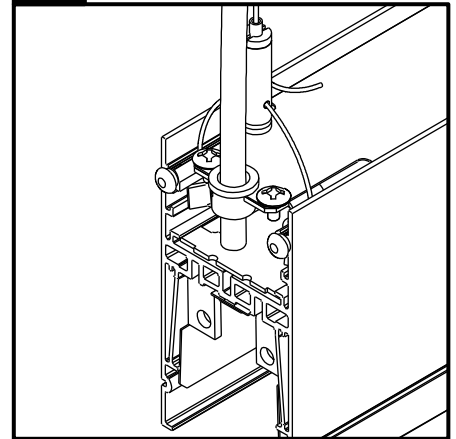
**Note:** See leveling instructions.

## ! Leveling Instructions

**IMPORTANT:** For side to side adjustment of the cable gripper, loosen adjustment screw at bottom of cable gripper. For vertical leveling, support bottom of fixture, press plunger on top of cable gripper and slowly lift/lower fixture to desired position. Release plunger when complete. Ensure fixture is secure before removing support. Repeat the same process around the fixture. When complete, re-tighten side to side adjustment screw on each gripper by hand.

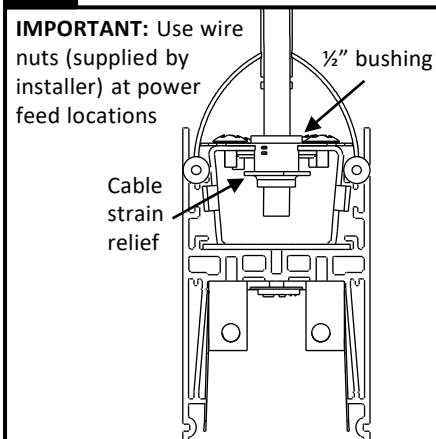


## 6 Power Cord Installation



Determine power feed location and remove 1/2" electrical knockout at required end. Install 1/2" bushing from above fixture as shown. Feed power cord from above into fixture wiring cavity.

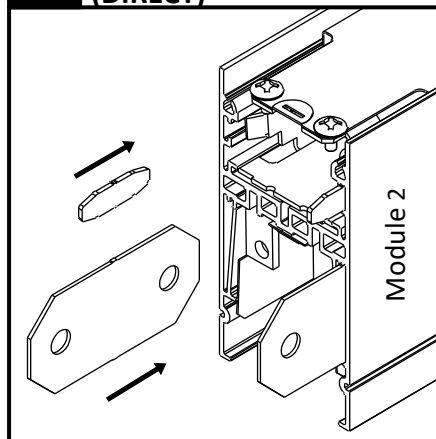
## 7 Power Cord Installation



**IMPORTANT:** Use wire nuts (supplied by installer) at power feed locations

Install and crimp provided cable metal strain relief bushing to secure power cord below fixture reflector. Use a Heyco PN0019(R12) crimping tool to ensure proper installation. Note: If installing a standalone fixture, skip to step 13.

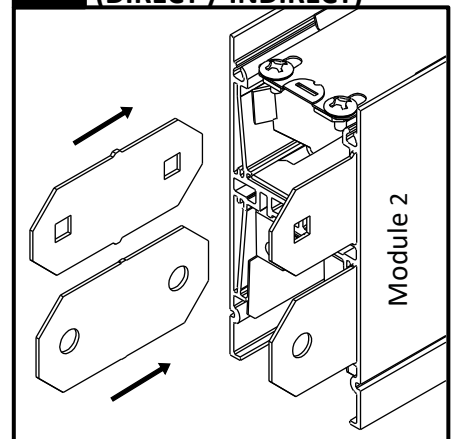
## 8a Fixture Joining (DIRECT)



With module 2 on the ground, tap small joiner aligners inside top chase. Insert larger joiner aligners inside lower chase as shown.

**IMPORTANT:** To allow for proper joining, ensure each center aligner tab is fully inserted inside module 2 housing, about 1/4" past the middle point.

## 8b Fixture Joining (DIRECT / INDIRECT)



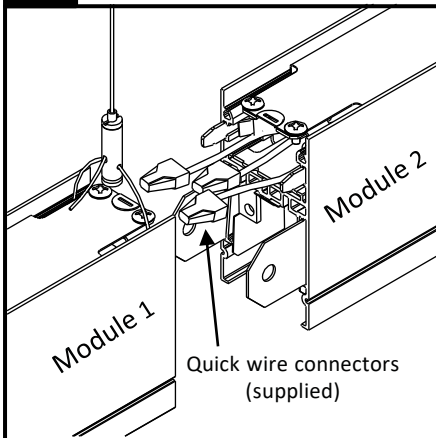
With module 2 on the ground, tap joiner aligners inside upper and lower chase as shown.

**IMPORTANT:** To allow for proper joining, ensure each center aligner tab is fully inserted inside module 2 housing, about 1/4" past the middle point.

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

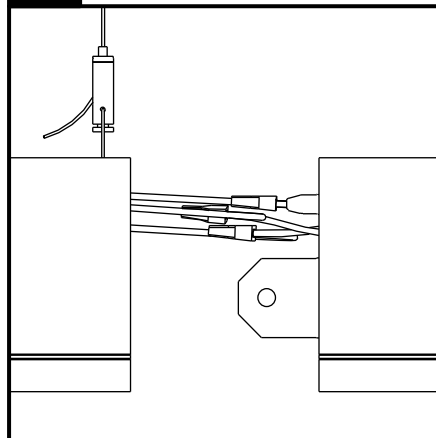
## 9 Fixture Joining - Preparation



Raise module 2 to the installed module 1 position. Install module 2 by following steps 1 - 7.

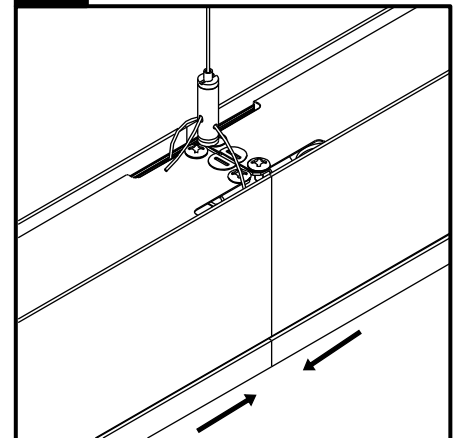
**IMPORTANT WIRING INSTRUCTIONS:**  
Quick wire connectors (supplied) are used for through wiring connections between fixtures. Wire nuts (by installer) are used for connection of power drops wiring to fixture wiring. See page 20-22 for control wiring information.

## 10 Wiring Connection



Bring modules close together, support module 2, complete wiring connections and tuck wires inside fixture wiring cavity. Remove push pins from module 1. Engage joiner aligners from module 2 inside module 1.

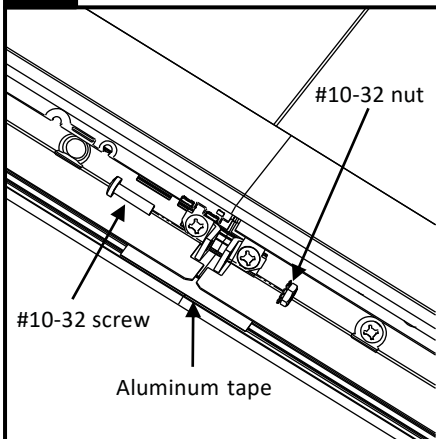
## 11 Fixture Joining



Ensure all connections are secure and all wires are fully tucked inside fixture wiring cavity. Slide fixture modules together gently. Level fixtures.

**IMPORTANT: Do not pinch wires between modules.**

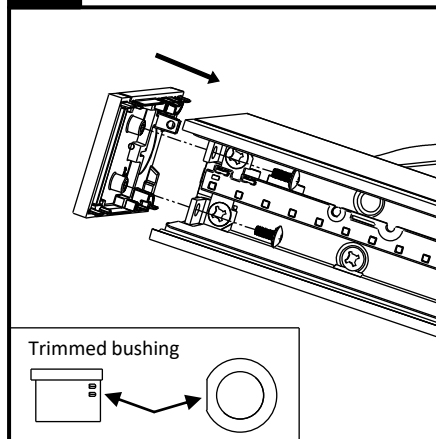
## 12 Fixture Joining



Secure fixture modules together using the two #10-32 machine screws and the two self-locking #10-32 nuts supplied. Tighten until joint seam is tight.

**IMPORTANT: Do not overtighten.**  
Add supplied aluminum tape on the inside of the extrusion at fixture joining as shown.

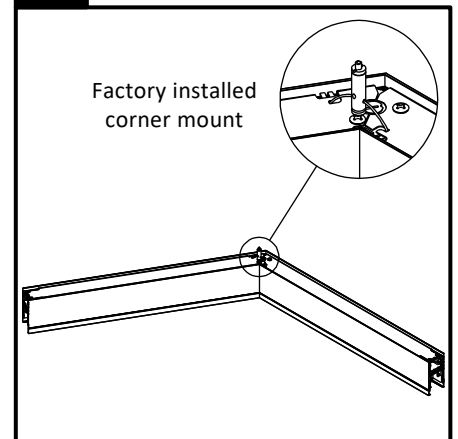
## 13 Endcap Installation



If power drop location is at the end of run, trim 1/2" bushing as shown. Remove push pins and slide endcap onto end of the fixture run and secure from below using two #8-32 X 5/16" screws. Use ratchet to tighten screws until endcap seam is tight.

**IMPORTANT: Do not overtighten.**

## ! CAUTION

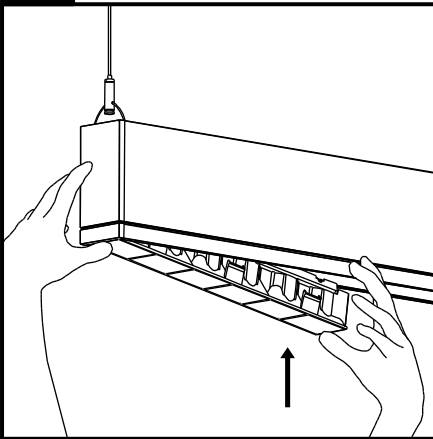


If a corner is required, it is recommended the corner module be installed first. All corners come with a factory installed cable sling assembly in the middle.

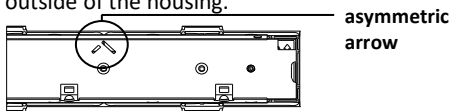
**! ATTENTION: Install in accordance with local and national building and electrical codes.**

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

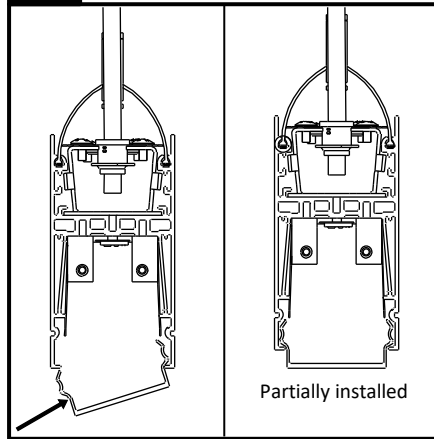
## 14 Louver Installation



Installation Tip: For easier installation, start on one end of the louver pressing gently on side tabs. **IMPORTANT:** For asymmetric louver fixtures, orientate the arrows on the louver pan to point at the label on the outside of the housing.

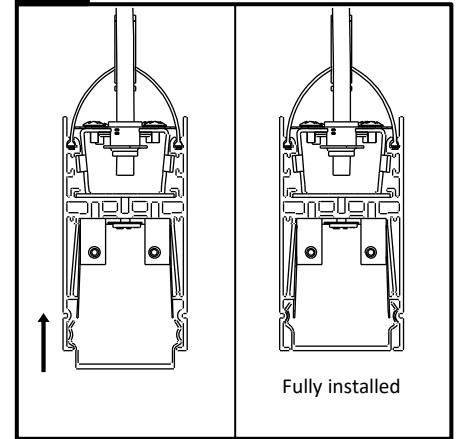


## 15 Fixture Lens Installation



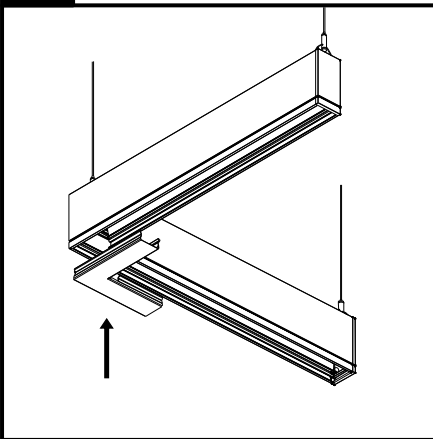
Install lenses removed in step 1.  
Installation Tip: For easier installation, start at a housing end or a joint by placing lens at an angle and squeezing in slightly from the other side to guide inside housing.

## 16 Fixture Lens Installation



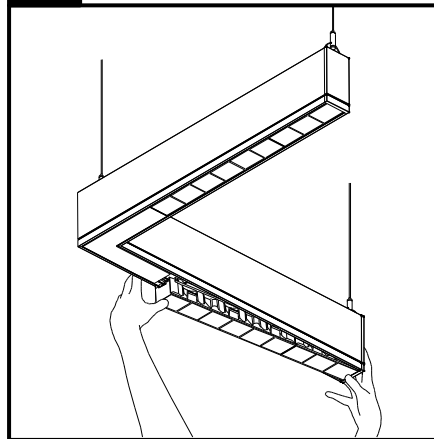
Once lens is positioned inside housing, starting on one end or joint, push upwards gently and work outward to complete the section. Ensure even gaps between lenses to allow for thermal expansion.

## 17 Corner Filler Installation



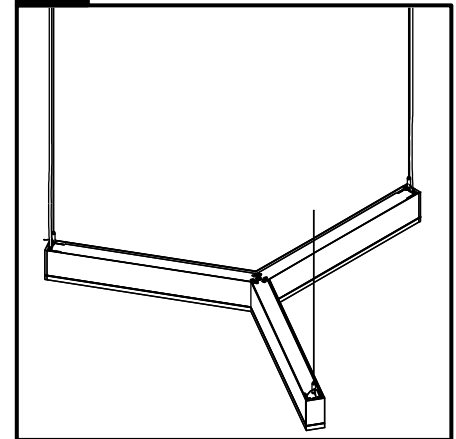
Installation filler plate before installing louvers. Tip: For easier installation, start by squeezing filler plate in slightly from both sides and guiding inside housing.

## 18 Corner Louver Installation



Installation Tip: For easier installation, start on one end of the louver pressing gently on side tabs.

## 19 Second Power Drop Installation



Repeat steps 6 and 7, for 2 circuit fixtures to install the second power drop (if applicable).



### Finishing:

- Ensure all fixtures are level.
- Check that all joint or endcap screws are installed, and all seams are tight.
- Ensure top pan is properly installed.
- Power fixtures on and check all modules light up.
- Ensure lens are securely installed.
- Tuck in excess suspension cable under top pan

**! ATTENTION: Install in accordance with local and national building and electrical codes.**



## System Overview

These instructions review how to install TruGroove Micro Flex vertical patterns. These steps are supplementary to the vertical fixture installation instructions.

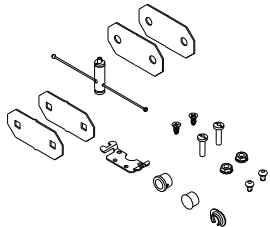
**IMPORTANT: Read all instructions including fixture/sensor wiring AND mechanical details before beginning installation.**

### TM Joint Kit - Locking

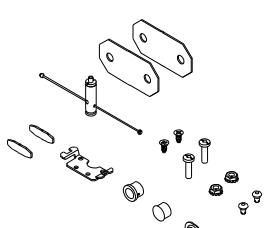
- Sling cable assembly (x1)
- Joiner aligners (x4)
- #10-24 x 9/16 screws (x2)
- #10-24 nuts (x2)
- Cable strain relief (x1) (Heyco #7418)
- ½" Bushing (x1)
- ½" Plug (x1)
- Push pins (x2)
- Sling bracket (x1)
- #8-18 x 3/8 screws (x2)

**Note:** 1 kit required per joint

#### D/I OPTION



#### DIR OPTION

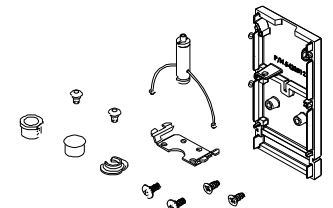


### TM Endcap Kit - Locking

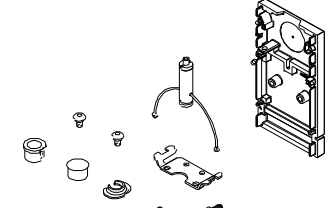
- TM endcap (x1)
- Sling cable assembly (x1)
- Sling bracket (x1)
- #8-18 x 3/8 screws (x2)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (x1) (Heyco #7418)
- ½" Bushing (x1)
- ½" Plug (x1)
- Push pins (x2)

**Note:** 1 kit required for each capped end

#### D/I OPTION



#### DIR OPTION

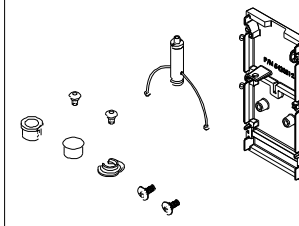


### TM Endcap Kit

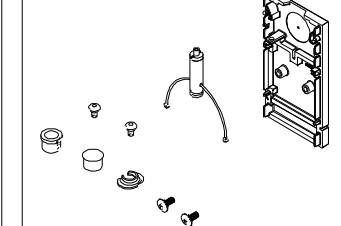
- TM endcap (x1)
- Sling cable assembly (x1)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (x1) (Heyco #7418) (x1)
- ½" Bushing (x1)
- ½" Plug (x1)
- Push pins (x2)

**Note:** 1 kit required for each capped end

#### D/I OPTION



#### DIR OPTION



### Required tools

- Philips #2 screwdriver and ratchet
- Heyco PN0019(R12) crimping pliers
- Wire stripper/cutter
- Level

## Assembly options

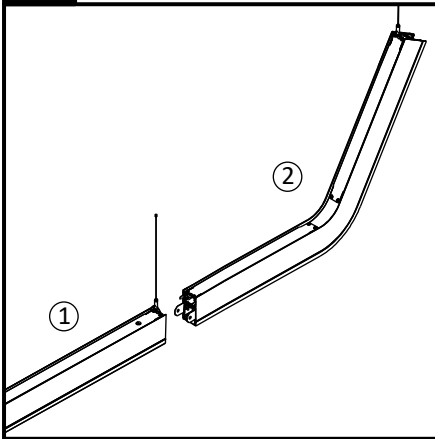
TruGroove Micro Flex fixtures are designed for full modularity in assembling patterns.

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

## 1 Pattern Preparation

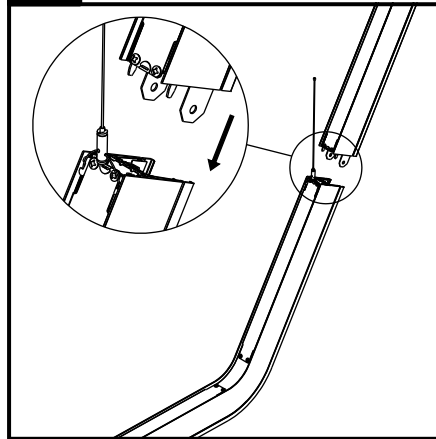


Always start patterns with a section that is suspended in the horizontal plane or that is an end of run fixture.

**RECOMMENDED:** Start building the pattern bottom to top. This will ease installation.

**IMPORTANT:** Refer to layout drawings for job specific order of fixture installation / joining.

## 2 Pattern Installation

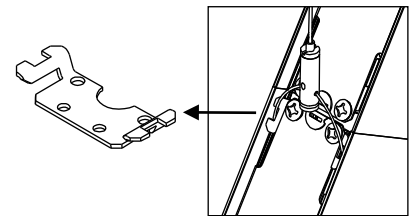


Follow steps 1 to 15 of Vertical - Multi Point Mount instructions to suspend and join fixtures. Read 'Safety Note' before starting installation.

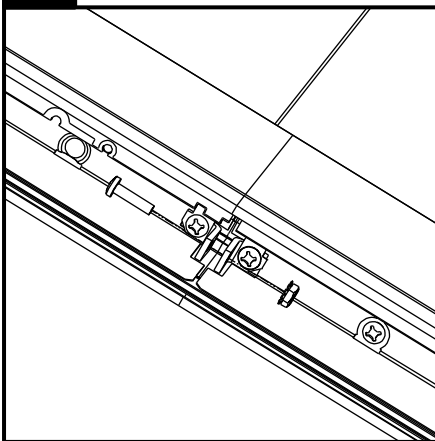
**NOTE:** Always ensure all suspension points are in place prior to joining.

## ! Safety note

**IMPORTANT:**  
Ensure all fixtures that are installed at an angle or any fixture adjacent to a TM Flex Vertical fixture use sling retention bracket to secure and fix sling mount.

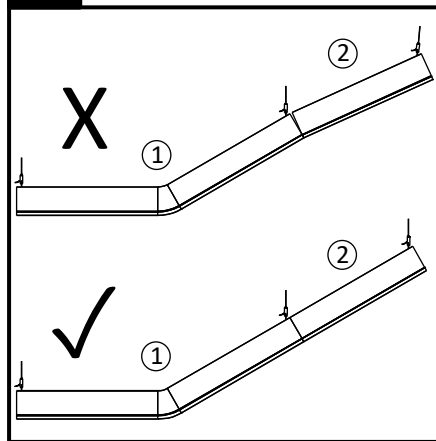


## 3 Secure Fixture



LOOSELY secure both fixtures using the two #10-32 machine screws and the two self locking #10-32 nuts supplied. Hand tighten fasteners.

## 4 Fixture Leveling

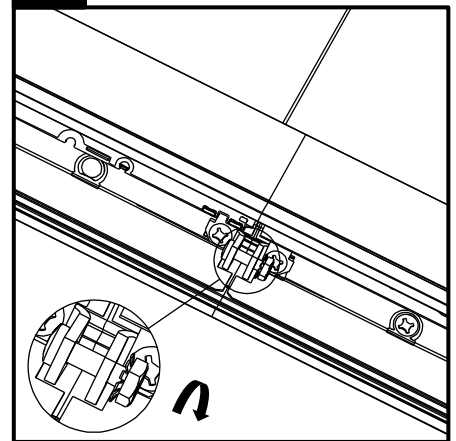


Ensure module 2 is installed level with module 1.

See 'Leveling Instructions' of Vertical - Multi Point Mount installation steps.

**NOTE:** Recommended use of a digital protractor to ensure appropriate fixture angle.

## 5 Fixture Joining



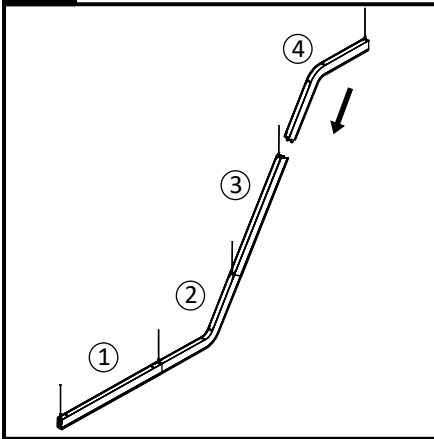
Once fixtures are level, tighten until joint seam is tight.

**IMPORTANT:** Do not overtighten.

**! ATTENTION:** Install in accordance with local and national building and electrical codes.

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

## 6 Pattern Installation



Continue installing the pattern one fixture at a time repeating all the previous steps. Follow steps **17 to 18** of Vertical - Multi Point Mount instructions to install endcaps.

## ! Finishing

- Ensure all fixtures are level.
- Check that all joint or endcap screws are installed, and all seams are tight.
- Ensure top pan is properly installed.
- Power fixtures on and check all modules light up.
- Ensure lens are securely installed.
- Tuck in excess suspension cable under top pan

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

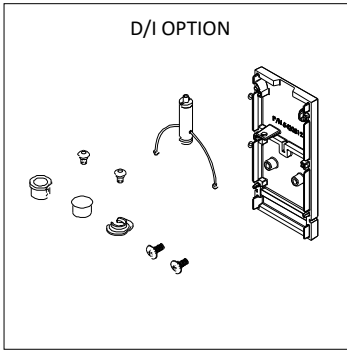




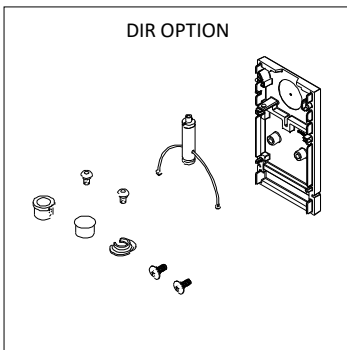
## System Overview

These instructions review how to install TruGroove Micro Flex horizontal patterns. These steps are supplementary to the horizontal fixture installation instructions.

**IMPORTANT: Read all instructions including fixture/sensor wiring AND mechanical details before beginning installation.**



D/I OPTION

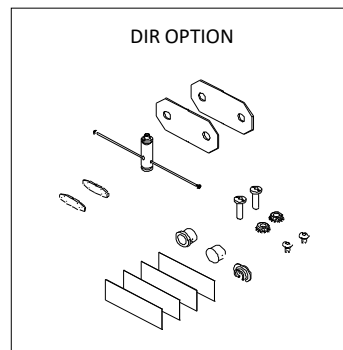


DIR OPTION

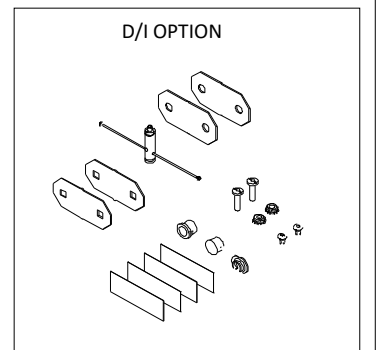
### TM Joint Kit

- Sling cable assembly (x1)
- Joiner aligners (x4)
- #10-24 x 9/16 screws (x2)
- #10-24 nuts (x2)
- Cable strain relief (Heyco #7418) (x1)
- ½" Bushing (x1)
- ½" Plug (x1)
- Push pins (x2)
- Light blocking tape (x4)

**Note:** 1 kit required per joint



DIR OPTION



D/I OPTION

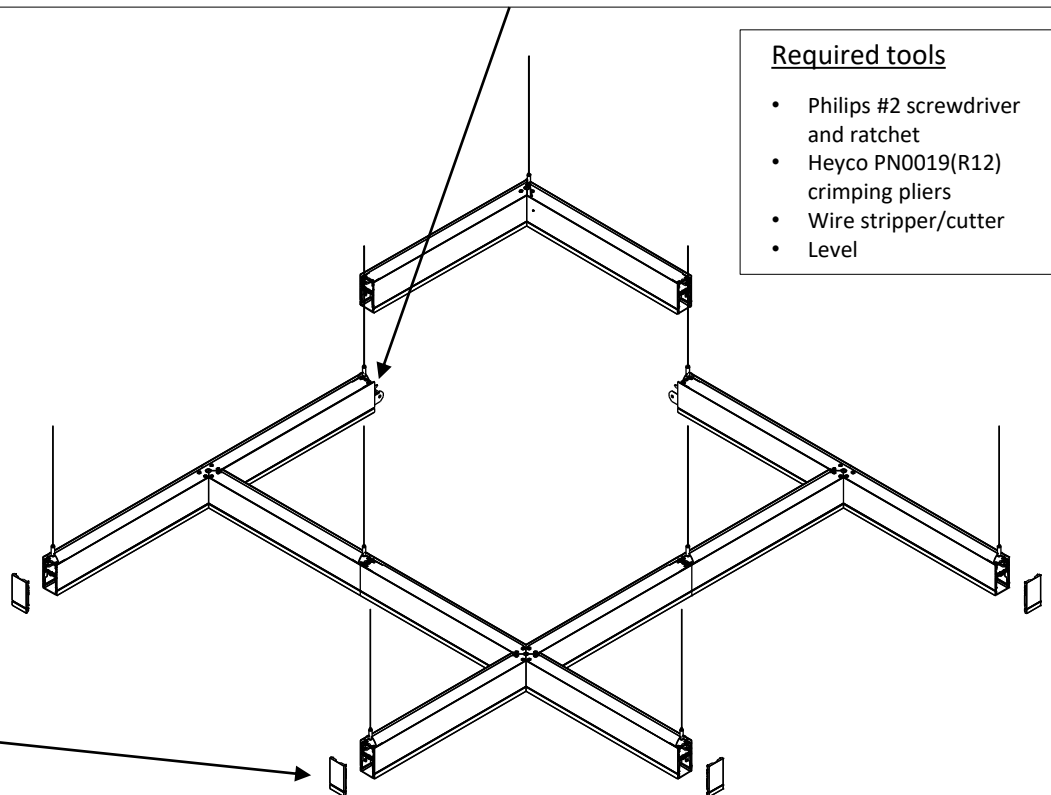
### Required tools

- Philips #2 screwdriver and ratchet
- Heyco PN0019(R12) crimping pliers
- Wire stripper/cutter
- Level

### TM Endcap Kit

- TM endcap (x1)
- Sling cable assembly (x1)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (Heyco #7418) (x1)
- ½" Bushing (x1)
- ½" Plug (x1)
- Push pins (x2)

**Note:** 1 kit required for each capped end



## Assembly options

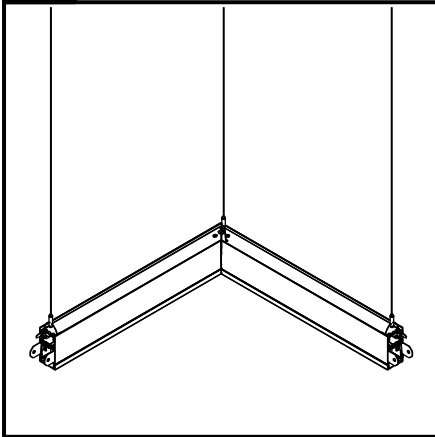
TruGroove Micro Flex fixtures are designed for full modularity in assembling shapes. This includes complex closed shapes, open lengths with turns, and the combination of both.

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

## 1 Pattern Preparation



Always start patterns with mounting a corner section or an end fixture.

**Note:** See "Order of fixture joining"

## ! Order of Fixture Joining

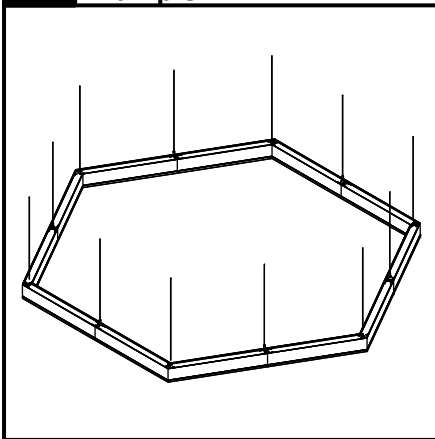
Order of fixture joining as per pattern type:

- Closed Circular Pattern: Start from an arbitrary section, working along the pattern perimeter.
- Grid Pattern: Start from a corner and continue in rows, one fixture at a time.
- Open Patterns: Start from one end of the pattern, work towards the other end of the pattern, one fixture at a time.

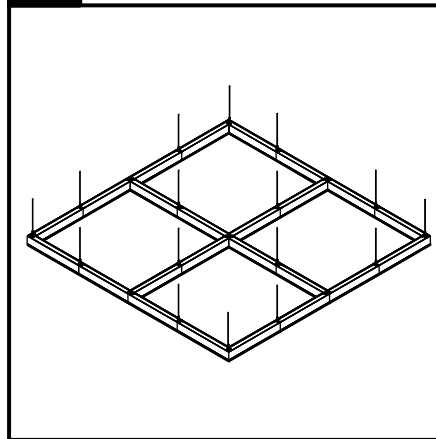
**IMPORTANT:**

Refer to layout drawings for job specific order of fixture installation / joining.

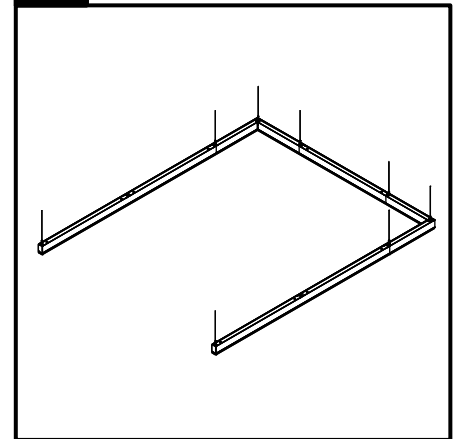
## ! Closed Circular Pattern Example



## ! Grid Pattern Example



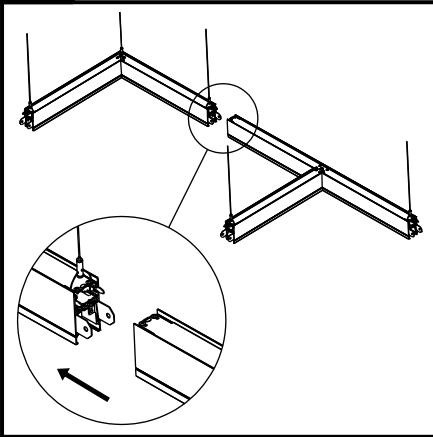
## ! Open Patterns



**! ATTENTION:** Install in accordance with local and national building and electrical codes.

**Note:** The installation steps figures might slightly differ from the actual fixture depending on the fixture option.

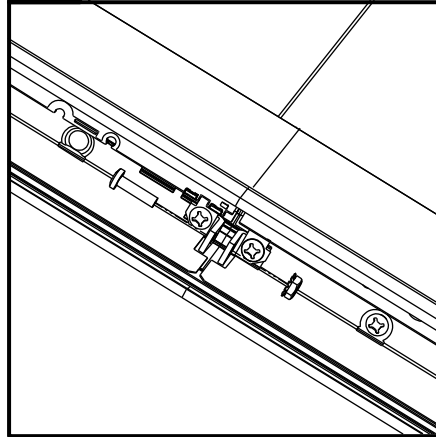
## 2 Pattern Installation



Follow steps 1 to 12 of horizontal fixture mounting instructions to suspend and join fixtures.

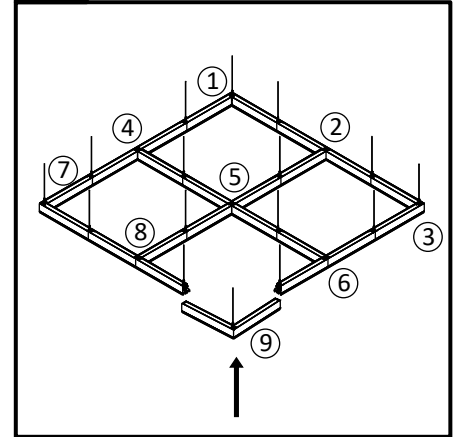
**Note:** Always ensure all suspension points are in place prior to joining.

## 3 Secure Fixtures



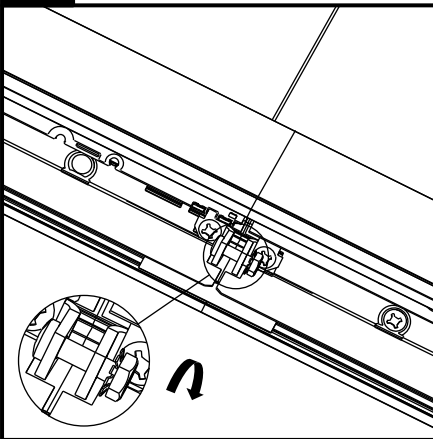
**LOOSELY** secure fixture modules together using the two #10-32 machine screws and the two self-locking #10-32 nuts supplied. Hand tighten fasteners.

## 4 Pattern Installation



Continue installing the pattern one fixture at a time following the order shown on the layout drawings. Repeating the last 2 steps.

## 5 Fixture Joining



Final torque joining fasteners in two stages in the same order as the fixtures were joined. Two stage torquing will ensure optimal alignment of fixtures.

**IMPORTANT:** Do not overtighten.

Add supplied aluminum tape on the inside of the extrusion at fixture joining as shown.

## ! Finishing

- Ensure all fixtures are level.
- Check that all joint or endcap screws are installed, and all seams are tight.
- Ensure top pan is properly installed.
- Power fixtures on and check all modules light up.
- Ensure lens are securely installed.
- Tuck in excess suspension cable under top pan

**! ATTENTION:** Install in accordance with local and national building and electrical codes.

*\*not for Enterprise or Signify Commissioned projects*

To configure a lighting system with Interact sensors or RF nodes;

- Ensure the luminaires are installed and powered on.
- Download the Interact Pro app from either Apple’s App Store (for iOS) or Google’s Play Store.

Download the Interact Pro app



- Register by tapping **Request access** on the login screen in the app.
- **Click** or **scan** the QR codes below to view instructions for setup.

**Interact Pro Foundation  
Quick Start Guide**



**Interact Pro Advanced  
Quick Start Guide**



**Interact Pro  
Documentation**



**Interact Pro  
Setup Video**



**Contact Us  
1-800-555-0050**



**! ATTENTION: Install in accordance with local and national building and electrical codes.**

### Sensors in Rows

#### Single Sensor Controlling Whole Row

1. Purple & brown (or purple & grey/pink) control wires **MUST** be connected between fixtures.

Note:

- A maximum of 8 drivers can be wired to one sensor; confirm fixture driver count with factory.

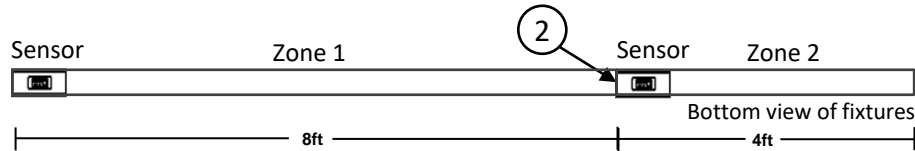


#### Multiple Sensors Controlling Separate Zones in a Row

2. Purple & brown (or purple & grey/pink) control wires **MUST NOT** be connected between zones.

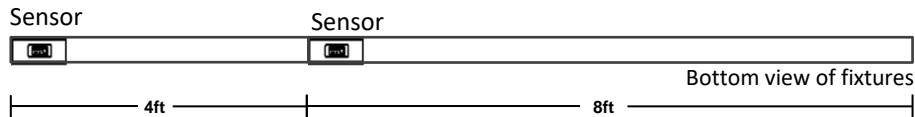
Notes:

- A maximum of 8 drivers can be wired to one sensor; confirm fixture driver count with factory.
- Only one sensor is allowed on a wired zone. (Sensors can be paired together wirelessly via a mobile app).

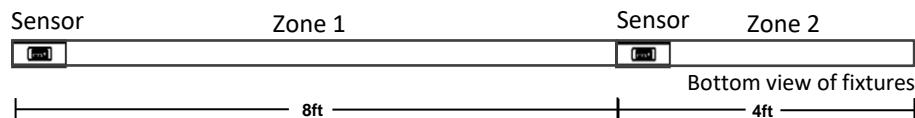


#### Sensor Spacing

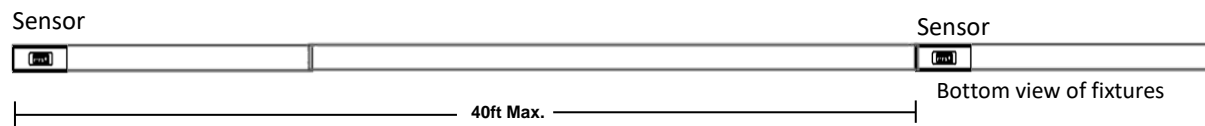
- For correct operation, sensors should be placed a minimum distance of 8ft apart.
- Wireless sensors should be placed no further than 40ft apart for good wireless signal connection.



Sensors are too close together for proper operation.



Sensors are at minimum required distance for correct operation.



Sensors are at a maximum distance of 40ft apart.

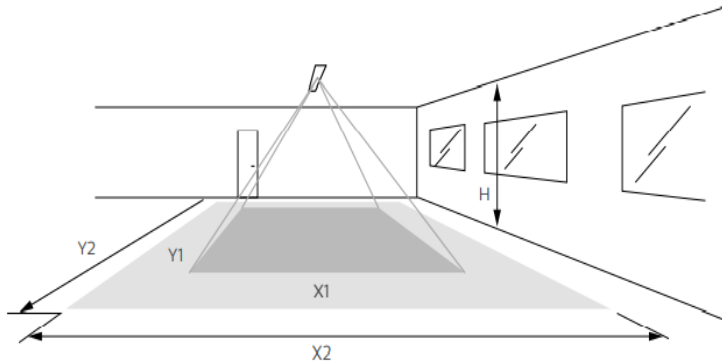
#### Important Consideration When Using Sensors in a Row

- For fixtures with wireless sensors (CS, SB or RA options):  
**DO NOT** connect fixture purple & brown (or purple & grey/pink) control wires to an external dimming switch. Fixture mains wiring should not be connected to a circuit with an external on/off switch.
- For best aesthetic condition, place sensors at ends of row only so as not to break the continuous lens.
- For better occupancy coverage in longer rows, sensors may be placed mid run, but keep in mind this will break the continuous lens into discrete sections.

**! ATTENTION: Install in accordance with local and national building and electrical codes.**

### Occupancy Sensor Coverage:

Note: Longer dimension of detection area (Y1, Y2) is parallel to longer dimension of the luminaire.



### Daylight sensor

The light sensor measures the total amount of light in a circular field of approximately 80% of the PIR detection area. The following aspects should be observed during installation:

- Minimum distance from the window  $\geq 2\text{ft}$  (0.6m).
- Prevent light reflections from outside entering the sensor (for example sunlight reflection on a car hood) as this will lead to incorrect light regulation.

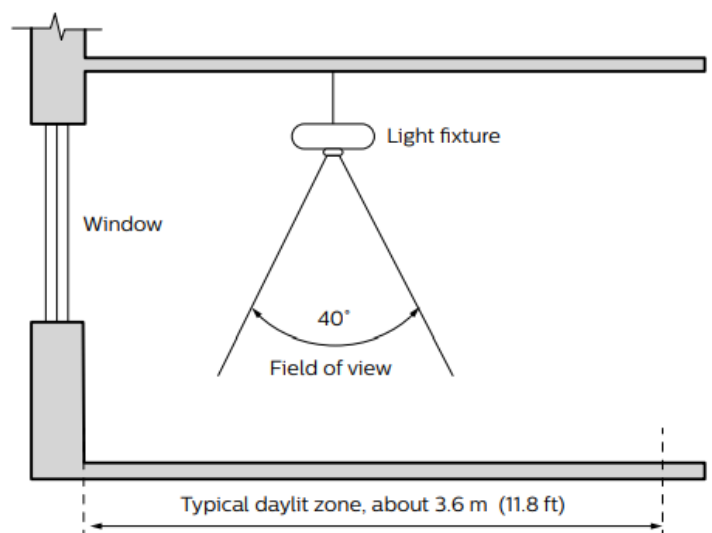
As a guideline the formula  $0.72 \times H$  can be used to calculate the minimum distance between the window and sensor whereby H is the height from the bottom of the window to the sensor.

Height	Minor movement		Major movement	
	X1	Y1	X2	Y2
2.4 m (7.9 ft)	1.9 m (6.2 ft)	2.9 m (9.5 ft)	2.9 m (9.5 ft)	4.3 m (14.1 ft)
3 m (9.8 ft)	2.4 m (7.9 ft)	3.6 m (11.8 ft)	3.6 m (11.8 ft)	5.4 m (17.7 ft)

The detection area for the movement sensor can be roughly divided into two parts:

- Minor movement (person moving  $\leq 3\text{ft/s}$  or  $0.9\text{m/s}$ ).
- Major movement (person moving  $\geq 3\text{ft/s}$  or  $0.9\text{m/s}$ ).

### Photosensor spatial response



**! ATTENTION: Install in accordance with local and national building and electrical codes.**

